



TPW ✓

PATENT
Attorney Docket No.: SPRUSON1100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Darren R. Shafren Art Unit: 1645
Application No.: 10/539,219 Examiner: Not Yet Assigned
Filed: January 17, 2006 Conf. No.: 4529
Title: METHOD OF TREATING A MALIGNANCY IN A SUBJECT VIA
DIRECT PICORNAVIRAL-MEDIATED ONCOLYSIS

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. § 1.97, enclosed are references relating to the above-identified application. For the convenience of the Examiner, the references are listed on the attached Form PTO-1449 and copies of the foreign and non-patent documents are enclosed herewith.

It is respectfully requested that these references be considered in the examination of this application and their consideration be made of written record in the application file.

CERTIFICATION UNDER 37 CFR §1.8

I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on June 12, 2006, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Ramona DeRyan 6/12/06
Ramona DeRyan

GT\6491783.1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /BL/

In re Application of:
Darren R. Shafren
Application No.: 10/539,219
Filed: January 17, 2006
Page 2

PATENT
Atty Docket No.: SPRUSON1100

No fee is deemed necessary in connection with the filing of this Information Disclosure Statement, because it is being filed before the mailing of a first Office Action on the merits. However, if any fee is required, authorization is hereby given to charge the amount of any such fee, or credit any overpayment, to Deposit Account No. 07-1896 referencing the above-identified attorney docket number. A copy of the Transmittal Sheet is enclosed.

Respectfully submitted,



Antony M. Novom, J.D.
Registration No. 45,517
Telephone: (858) 638-6641
Facsimile: (858) 677-1465

Date: June 12, 2006

DLA PIPER RUDNICK GRAY CARY US LLP
4365 Executive Drive, Suite 1100
San Diego, California 92121-2133
USPTO Customer No. 28213

GT6491783.1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /BL/



PATENT
Attorney Docket No.: SPRUSON1100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Darren R. Shafren Art Unit: 1645
Application No.: 10/539,219 Examiner: Not Yet Assigned
Filed: January 17, 2006 Conf. No.: 4529
Title: METHOD OF TREATING A MALIGNANCY IN A SUBJECT VIA
DIRECT PICORNAVIRAL-MEDIATED ONCOLYSIS

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL SHEET

Sir:

Transmitted herewith for the above-identified application please find:

1. Information Disclosure Statement (2 pgs.);
2. Form PTO 1449 (3 pgs.);
3. Twenty-six (26) references; and
4. Return Receipt Postcard.

CERTIFICATION UNDER 37 CFR §1.8

I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on June 12, 2006, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

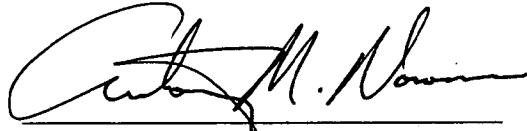
Ramona DeRyan 6/12/06
Ramona DeRyan

In re Application of:
Darren R. Shafren
Application No.: 10/539,219
Filed: January 17, 2006
Page 2

PATENT
Atty Docket No.: SPRUSON1100

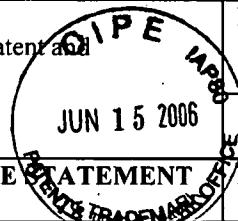
No fee is deemed necessary in connection with the filing of this Information Disclosure Statement, because it is being filed before the mailing of a first Office Action on the merits. However, if any fee is required, authorization is hereby given to charge the amount of any such fee, or credit any overpayment, to Deposit Account No. 07-1896 referencing the above-identified attorney docket number. A copy of this Transmittal Sheet is enclosed.

Respectfully submitted,



Antony M. Novom, J.D.
Registration No. 45,517
Telephone: (858) 638-6641
Facsimile: (858) 677-1465

DLA PIPER RUDNICK GRAY CARY US LLP
4365 Executive Drive, Suite 1100
San Diego, California 92121-2133
USPTO Customer No. 28213

Docket No.:
SPRUSON1100Application No.:
10/539,219

Applicants: Darren R. Shafren

INFORMATION DISCLOSURE STATEMENT
BY APPLICANTFiling Date:
January 17, 2006Group Art Unit:
1645

U.S. PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION (YES/NO)

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

AA	Andreansky, et al., "The application of genetically engineered herpes simplex viruses to the treatment of experimental brain tumors." <i>Proc. Natl. Acad. Sci. USA</i> Vol. 93, pp. 11313-11318 (1996).
AB	Ansardi, et al., "RNA Replicons Derived from Poliovirus Are Directly Oncolytic for Human Tumor Cells of Diverse Origins." <i>Cancer Research</i> , Vol. 61, pp. 8470-8479 (2001).
AC	Bartolazzi, et al., "Localization of the alpha 3 beta 1 Integrin in Some Common Epithelial Tumors of the Ovary and in Normal Equivalents." <i>AntiCancer Research</i> , 13:1-12 (1993).
AD	Bergelson, et al., "The Integrin VLA-2 Binds Echovirus 1 and Extracellular Matrix Ligands by Different Mechanisms." <i>J. Clin. Invest.</i> , Vol. 92, pp. 232-239 (1993).
AE	Cannistra, et al., "Expression and Function of beta 1 and alpha v beta 3 Integrins in Ovarian Cancer." <i>Gynecologic Oncology</i> , Vol. 58, pp. 216-225 (1995).
AF	Cardarelli, et al., "The Collagen Receptor alpha 2 beta 1, from MG-63 and HT1080 Cells, Interacts with a Cyclic RGD Peptide." <i>The Journal of Biological Chemistry</i> , Vol. 267, No. 32, pp. 23159-23164 (1992).

EXAMINER

/Bao Li/

GT\6491805.1

DATE CONSIDERED

03/27/2008

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office		Docket No.: SPRUSON1100	Application No.: 10/539,219
Applicants: Darren R. Shafren			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Filing Date: January 17, 2006	Group Art Unit: 1645

	AG	Casey, et al., "Beta 1-Integrins Regulate the Formation and Adhesion of Ovarian Carcinoma Multicellular Spheroids." <i>American Journal of Pathology</i> , Vol. 159, No. 6, pp. 2071-2080 (2001).
	AH	Chan, et al., "In Vitro and in Vivo Consequences of VLA-2 Expression on Rhabdomyosarcoma Cells." <i>Science</i> , Vol. 251, pp. 1600-1602 (1991).
	AI	Frankel, et al., "Abrogation of Taxol-induced G ₂ -M Arrest and Apoptosis in Human Ovarian Cancer Cells Grown as Multicellular Tumor Spheroids." <i>Cancer Research</i> , Vol. 57, pp. 2388-2393 (1997).
	AJ	He, et al., "A simplified system for generating recombinant adenoviruses." <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 95, pp. 2509-2514 (1998).
	AK	Kamata, Tetsuji and Takada, Yoshikazu, "Direct Binding of Collagen to the I Domain of Integrin $\alpha 2\beta 1$ (VLA-2, CD49b/CD29) in a Divalent Cation-independent Manner." <i>The Journal of Biological Chemistry</i> , Vol. 269, pp. 26006-26010 (1994).
	AL	Kramer, Randall H. and Marks, Nancy, "Identification of Integrin Collagen Receptors on Human Melanoma Cells." <i>The Journal of Biological Chemistry</i> , Vol. 264, No. 8, pp. 4684-4688 (1988).
	AM	Moser, et al., "Evidence for Preferential Adhesion of Ovarian Epithelial Carcinoma Cells to Type I Collagen Mediated by the $\alpha 2\beta 1$ Integrin." <i>Int. J. Cancer</i> , Vol. 67, pp. 695-701 (1996).
	AN	Natali, et al., "Clinical Significance of $\alpha_v\beta_3$ Integrin and Intercellular Adhesion Molecule-1 Expression in Cutaneous Malignant Melanoma Lesions." <i>Cancer Research</i> , Vol. 57, pp. 1554-1560 (1997).
	AO	Nemunaitis, John, "Oncolytic viruses." <i>Investigational New Drugs</i> , Vol. 17, pp. 375-386 (1999).
	AP	Pietiäinen, Vilja, "Effects of echovirus 1 Infection on Cellular Gene Expression." <i>Virology</i> , Vol. 276, pp. 243-250 (2000).
	AQ	Pevear, et al., "Activity of Pleconaril against Enteroviruses." <i>Antimicrobial Agents and Chemotherapy</i> , Vol. 43, No. 9, pp. 2109-2115 (1999).
	AR	Ramos, et al., "Analysis of Integrin Receptors for Laminin and Type IV Collagen on Metastatic B16 Melanoma Cells." <i>Cancer Research</i> , Vol. 50, pp. 728-734 (1990).

EXAMINER GT\6491805.1	DATE CONSIDERED /Bao Li/ 03/27/2008
---------------------------------	--

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449
ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /BL/

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office		Docket No.: SPRUSON1100	Application No.: 10/539,219
Applicants: Darren R. Shafren			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Filing Date: January 17, 2006	Group Art Unit: 1645

	AS	Randazzo, et al., "Treatment of Experimental Intracranial Murine Melanoma with a Neuroattenuated Herpes Simplex Virus 1 Mutant." <i>Virology</i> , Vol. 211, pp. 94-101 (1995).
	AT	Roszman, et al., "Cell Recognition and Entry by Rhino- and Enteroviruses." <i>Virology</i> , Vol. 269, pp. 239-247 (2000).
	AU	Satyamoorthy, et al., "Adenovirus Infection Enhances Killing of Melanoma Cells by a Mitotoxin.", <i>Cancer Research</i> , Vol. 57, pp. 1873-1876 (1997).
	AV	Shafren, et al., "Coxsackievirus A21 Binds to Decay-Accelerating Factor but Requires Intercellular Adhesion Molecule 1 for Cell Entry." <i>Journal of Virology</i> , Vol. 71, No. 6, pp. 4736-4743 (1997).
	AW	Strong, et al., "The molecular basis of viral oncolysis: usurpation of the Ras signaling pathway by reovirus." <i>The EMBO Journal</i> , Vol. 17, No. 12, pp. 3351-3362 (1998).
	AX	Tsao, et al., "Characterization of Human Ovarian Surface Epithelial Cells Immortalized by Human Papilloma Viral Oncogenes (HPV-E6E7 ORFs)." <i>Experimental Cell Research</i> , Vol. 218, pp. 499-507 (1995).
	AY	Xiao, et al., "Interaction of Coxsackievirus A21 with Its Cellular Receptor, ICAM-1." <i>Journal of Virology</i> , Vol. 75, No. 5, pp. 2444-2451 (2001).
	AZ	Xing, Li, "Non-enveloped Virus Infection Probed with Host Cellular Molecules: A Structural Study." Centre for Biotechnology, Department of Biosciences at Novum, Karolinska Institutet, Sweden: Stockholm 2002.

EXAMINER GT6491805.1	/Bao Li/ 	DATE CONSIDERED 03/27/2008
--------------------------------	--------------	--------------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449
ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /BL/